Postal Rate and Fee Changes, 1997   )   Docket No. R97-1

OFFICE OF THE CONSUMER ADVOCATE
INTERROGATORIES TO UNITED STATES POSTAL SERVICE
WITNESS PAUL M. LION
(OCA/USPS-T24-41-47)
August 7, 1997

Pursuant to sections 25 and 26 of the Rules of Practice of the Postal Rate

Commission, the Office of the Consumer Advocate hereby submits interrogatories and

requests for production of documents. Instructions included with OCA interrogatories

1-7 to the United States Postal Service dated July 16, 1997, are hereby incorporated by
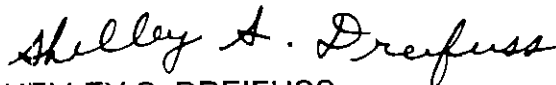
reference.

Respectfully submitted,

Gail Willette

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OCA/USPS-T24-41. The following tabulation of rental cost per square foot is based on the data file RENT.DATA included in LR-H-216.

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        Comparison of av(rent/sf) with (total rent)/(total sf).
               _TYPE_=0,1 for all offices, by GROUP
              * indicates that GROUP is missing


   OBS    GROUP    _TYPE_    _FREQ_     RCSF     TOTRSF     RATIO
    1               0        24860     6.7281    5.9271    0.88095
    2       *       1          286     7.9224    3.4632    0.43714
    3       A       1           30    23.4905    8.3891    0.35713
    4       B       1          153    16.7431   13.9132    0.83099
    5       C       1         6050     7.7267    5.5969    0.72437
    6       D       1        14171     5.9971    6.2122    1.03587
    7       E       1         4170     7.1936    7.1541    0.99451
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a.   Please confirm that the above frequencies (_FREQ_) and rental cost per square foot values (RCSF) update the similar figures given in LR-H-188. If you do not confirm, please explain and provide the correct figures consistent with the data files of LR-H-216.

b.   Please confirm that all differences between the above table and the analogous figures presented in LR-H-188 are due to the change in the delivery statistics file described in footnote 1, page 1 of LR-H-216.

OCA/USPS-T24-42. Attachment 1 to this interrogatory provides a list of the 30 group A facilities in the RENT.DATA file contained in LR-H-216. Attachment 2 provides a list of the 29 group A facilities listed in the BOXES.DATA file contained in LR-H-216.

a.   Please confirm that several group A observations in the BOXES.DATA file contain no installed boxes. If you do not confirm, please explain how the figures in rows 2 and 19 of Attachment 2 should be interpreted.

b.   Please confirm that the rental cost per square foot figures for offices having no boxes are used in library reference H-188 to compute rental cost per square foot.

If you confirm, please explain why these offices without installed boxes were included in the calculations. If you do not confirm, please provide a reference to the SAS code that excludes these observations from your calculations.

c.   Please identify which of the group A observations on the RENT.DATA file correspond to facilities that have no installed boxes.

OCA/USPS-T24-43. Please refer to the RENT.DATA and BOXES.DATA files included in LR-H-216. Please provide a merged file that provides CAG, Group, rental costs, square feet, boxes installed (by box size), and boxes rented (by box size) for the facilities that are represented in both the LR-H-216 files.

OCA/USPS-T24-44. Please refer to your response to OCA/USPS-T24-5b. In that response you state, "It is often the case that the large facilities are built in industrial areas and have few, if any, boxes. On the other hand, many smaller facilities, such as nondelivery offices, have nothing but boxes."

a.   Would an equivalent assertion be that the proportion of square footage devoted to boxes is inversely related to the facility's square footage? Please explain.

b.   Have you tested whether the proportion of square footage devoted to boxes is inversely related to the facility's square footage? If so, what are the results? If not, why not?

c.   Could the inverse relationship stated in part a of this interrogatory be tested using the RENT.DATA and the BOXES.DATA of library reference H-216? Could the inverse relationship stated in part a of this interrogatory be tested using the

"Facility Cost Development Update" (LR-G-120, R94-1)? If not, what additional data would be required to test whether the proportion of square footage devoted to boxes is inversely related to the facility's square footage? Please provide in electronic form any available data that could be used to estimate the inverse relationship.

d.   Are you suggesting that smaller offices should receive a larger allocation of space costs than they would when calculating average cost per square foot as the ratio of total group rental cost to total group square feet? If so, why? If not, please elaborate on your point.

e.   Are you suggesting that your method of calculating average cost per square foot as an average of averages does, in fact, result in a larger allocation of space costs to smaller offices (e.g., nondelivery offices) than would result from calculating average cost per square foot as the ratio of total group rental cost to total group square feet? If not, please elaborate on your point.

f.   Please refer to the attachment to this interrogatory. The columns labeled "rcsf-key" and "totrsf-key" display the relative allocation of space cost to fee group using your average of averages technique and a simple ratio of rent to total square footage, respectively. Please confirm that your technique allocates *more* space cost to fee groups A and C and *less* space cost to fee groups B, D, and E. If you confirm, please comment on the desirability and consistency of such a result. If you do not confirm, please provide a corrected table of relative allocations of space cost, showing the source and derivation of all numbers.

OCA/USPS-T24-45. Please refer to your response to OCA/USPS-T24-5. The following

table summarizes information for the first 5 group A records on the RENT.DATA file of

H-216. RCSF denotes the rental cost per square foot from the file, RA denotes rent

amount, and SF denotes square footage. Totals for these variables and the average

for RCSF have also been included. The column labeled comp1RA is a computed rent

amount determined by multiplying SF by the average of the facility rental cost per

square foot values.

OBS	GROUP	CAG	RCSF	RA	SF	comp1RA	comp2RA
				a	b	c=b*e	d=b*f
1	A	A	20.3022	395000	19456	447041	271487.2
2	A	A	0 002	1	508	11672	7088.584
3	A	A	55.3502	182379	3295	75709	45978.12
4	A	A	29.7628	41400	1391	31961	19409.88
5	A	A	9.4678	580000	61260	1407571	854816.2
total			114.885	1198780	85910	1973954	1198780
average (e)			22.977				
ratio of totalRA to totalSF (f)				13.95391			
relative difference from actual						65%	0%

a.   Please confirm that the average of RCSF values (AvRCSF=22.977) applied to

      facility square footage figures generally will not produce the known total rent

      amounts.

b.   Please confirm that the total computed RA values overstate total known RA by

      about 65 percent for the first five group A facilities.

c.   Please refer to the column labeled comp2RA. Please confirm that if (total rent

      amount)/(total square footage) is used as the measure of overall cost per square

      foot, then there is no deviation from the total of known RA values for the first five

      group A facilities.

d.   Please confirm that the "constant of proportionality (c)" discussed at page 22 of

your testimony includes any adjustments necessary to account for the fact that

the average of facility rental costs per square foot is not compatible with the total

rent amount for the facilities. If you do not confirm, please provide citations to

where any such adjustments may be found.

OCA/USPS-T24-46. Please refer to your testimony at page 17, Table 9B., and the

column "New Fee." Please confirm that the "New Fee" for box size 5 in Fee Group A

should be $550. If you do not confirm, please explain.

OCA/USPS-T24-47. Please refer to page 22 of your testimony, lines 1-16.

a.   Please confirm that the units for AC_{jk} are dollars. If you do not confirm, please

state the correct units and explain why they are not dollars.

b.   Please confirm that the units for R_j are dollars-ft^{-2}. If you do not confirm, please

state the correct units and explain why they are not dollars per square foot.

c.   Please confirm that the units for EC_{jk} are size-1 boxes. If you do not confirm,

please state the correct units and explain how they are determined.

d.   Please confirm that the units for Q are size-1-box-dollars-ft^{-2}. If you do not

confirm, please state the correct units and explain why they are not size-1-box-

dollars per square foot.

e.   Please confirm that the units for c (in either equation 1 or 2) are square feet per

size-one box (or square feet per "basic unit of capacity"), not dollars. If you do

not confirm, please state the correct units and explain how they are determined.

f.   Let B equal the square feet occupied by a "basic unit of capacity," i.e., a size-1 box. Please confirm that the units for B are square feet per size-1 box and that B is a known value that does not vary across fee groups. If you confirm, please provide the value of B. If you do not confirm, please explain.

g.   Please refer to page 9 of LR-F-183, Docket No. R90-1. Please confirm that a standard box section contains one size-5 box and that the floor space occupied by a standard box section equals the floor space occupied by a size-5 box. If you do not confirm, please explain.

h.   Please confirm that a standard box section contains the equivalent of 5 size-5 boxes or 10 size-4 boxes or 20 size-3 boxes or 30 size-2 boxes or 60 size-1 boxes. If you do not confirm please explain.

i.   Please confirm that the square feet occupied solely by box sections (excluding lobby space in front of boxes) in Group j equals $E_jB/5$, where division by 5 accounts for stacking box modules five high. If you do not confirm, please provide the correct expression for the square feet occupied solely by box sections (excluding lobby space in front of boxes) in Group j.

j.   Please confirm that you would estimate the cost of space occupied solely by box sections (excluding lobby space in front of boxes) in Group A as $R_AE_AB/5$ = $2,084,221B/5$, where R_A = $23.49 and E_A = 88,728. If you do not confirm, please explain how to interpret the figure $2,084,221, which is one of the five terms summed to get your value of Q.

k.   Please confirm that the cost of space occupied solely by box sections (excluding lobby space in front of boxes) in all fee Groups equals $(B/5)(R_AE_A +$ $+ R_EE_E)=$

QB/5 = $155,481,018B/5. If you do not confirm, please provide the correct value and explain how to interpret the value of Q.

l. Please confirm that the units for QB/5 are dollars. If you do not confirm, please state the correct units and show their derivation.

m. Let d equal $223,226,000/QB/5 = $223,226,000/$155,481,081B/5 = 7.18/B. Please confirm that d has no units associated with it. Please confirm that d is the ratio of total space devoted to box sections (including lobby space) to space occupied solely by boxes (excluding lobby space). Please confirm that your constant c = dB/5. If you do not confirm, please explain how to interpret your constant c.

n. Please confirm that use of the "TOTRSF" average cost per square foot figures from interrogatory OCA/USPS-T24-44 in the calculation of Q yields a value for c of 1.73 square feet per size-1 box and a value for d of 8.63/B. If you do not confirm, please explain.

o. Please confirm that the square feet occupied by a size-1 box is indeed a constant and should not vary with the estimated rental cost per square foot at various fee groups. If you do not confirm, please explain.

p. Please confirm that there is only one correct value for d, the ratio of box space (including lobby space) to box space (excluding lobby space) at a given point in time. Please confirm that the correct value for d can only be derived from total rent, E_j, and R_j when the values for R_j are calculated as the simple ratio of total group space cost divided by total group square feet. If you do not confirm,

please provide the actual value of d and show that your set of group rents per square foot will generate d.

q.   Please confirm that your constant c accomplishes at least four separate adjustments: (1) expanding square feet occupied solely by boxes to total square feet devoted to boxes, (2) accounting for the fact that box modules are stacked five high, (3) accounting for the space occupied by a single size-one box, and (4) deflating for the overstatement of total rent resulting from using the average of averages method of estimating rent per square foot by fee group. If you do not confirm, please provide a detailed explanation and justification for your use of a "constant of proportionality (c)" at page 22 of your testimony.

LISTING OF ALL GROUP=A RECORDS IN RENT.DATA FILE   47
                                12:39 Tuesday, August 5, 1997

OBS	GROUP	CAG	RCSF	RA	SF
1	A	A	20.3022	395000	19456
2	A	A	0.0020	1	508
3	A	A	55.3502	182379	3295
4	A	A	29.7628	41400	1391
5	A	A	9.4678	580000	61260
6	A	A	2.9039	100000	34437
7	A	A	27.1367	575000	21189
8	A	A	28.5006	73332	2573
9	A	A	16.7277	64000	3826
10	A	A	2.6468	45560	17213
11	A	A	44.1327	126043	2856
12	A	A	22.5000	72000	3200
13	A	A	48.3000	281299	5824
14	A	A	22.5389	8700	386
15	A	A	30.0809	178500	5934
16	A	A	31.2776	455840	14574
17	A	A	2.8377	1340000	472215
18	A	A	9.5053	539200	56726
19	A	A	46.4306	350040	7539
20	A	A	21.2020	85020	4010
21	A	A	26.5564	54600	2056
22	A	A	1.2585	13692	10880
23	A	A	14.4796	32000	2210
24	A	A	21.0555	80011	3800
25	A	A	15.3404	32000	2086
26	A	A	19.1872	285813	14896
27	A	A	64.0482	366420	5721
28	A	A	10.6878	170000	15906
29	A	A	8.4950	55812	6570
30	A	A	52.0000	177580	3415

LISTING OF ALL GROUP=A RECORDS IN BOXES.DATA FILE   48
                          12:39 Tuesday, August 5, 1997

O B S	C A G	G R O U P	BOXINST1	BOXINST2	BOXINST3	BOXINST4	BOXINST5	BOXRENT1	BOXRENT2	BOXRENT3	BOXRENT4	BOXRENT5
1	A	A	2861	40	8	4	0	2622	36	8	3	0
2	A	A	0	0	0	0	0	0	0	0	0	0
3	A	A	1020	64	43	8	4	997	59	38	8	4
4	A	A	2724	201	120	40	0	2674	195	118	38	0
5	A	A	780	0	0	0	0	697	0	0	0	0
6	A	A	360	24	8	0	0	340	20	6	0	0
7	A	A	720	32	20	6	3	685	29	20	5	3
8	A	A	538	189	45	0	0	538	189	45	0	0
9	A	A	612	88	72	0	0	565	68	40	0	0
10	A	A	2026	159	53	0	0	1069	147	53	0	0
11	A	A	3062	396	268	40	25	2473	346	234	33	18
12	A	A	1081	0	0	0	0	930	0	0	0	0
13	A	A	1357	90	35	0	0	1267	87	32	0	0
14	A	A	888	0	4	0	0	878	0	4	0	0
15	A	A	840	0	0	0	0	678	0	0	0	0
16	A	A	2004	8	4	2	0	1944	8	4	2	0
17	A	A	3660	0	120	0	0	0	0	105	0	0
18	A	A	972	32	0	0	0	930	26	0	0	0
19	A	A	0	0	0	0	0	0	0	0	0	0
20	A	A	660	0	20	0	0	649	0	17	0	0
21	A	A	600	80	40	10	0	446	9	11	2	0
22	A	A	1800	0	38	0	0	1562	0	32	0	0
23	A	A	1010	144	60	0	0	537	72	35	0	0
24	A	A	1416	104	52	0	16	1413	102	52	0	1
25	A	A	1260	40	40	0	0	0	0	0	0	0
26	A	A	902	120	24	4	2	642	114	24	3	2
27	A	A	990	16	20	0	0	674	11	7	0	0
28	A	A	972	144	60	2	0	909	117	31	0	0
29	A	A	420	16	8	2	1	231	9	6	2	0

OBS	GROUP	_TYPE_	_FREQ_	RCSF	RA	SF	TOTRSF	RATIO
3	A	1	30	23.4905	6761242	805952	8.3891	2.8001216
4	B	1	153	16.7431	12496169	898149	13.9132	1.2033968
5	C	1	6050	7.7267	211145264	37725109	5.5969	1.3805321
6	D	1	14171	5.9971	133551070	21498175	6.2122	0.9653746
7	E	1	4170	7.1936	26062082	3642977	7.1541	1.0055213

	rcsf-wt	totrst-wt
A	18932215	6761211.9
B	15037799	12496127
C	291490600	211143663
D	128926705	133550963
E	26206119	26062222
Totals	480593438	390014186

	rcsf-ky	totrsf-key	ratio
A	0.0393934	0.0173358	2.2723721
B	0.0312901	0.0320402	0.9765881
C	0.6065222	0.5413743	1.120338
D	0.2682656	0.3424259	0.7834268
E	0.0545287	0.0668238	0.8160069

CERTIFICATE OF SERVICE

I hereby certify that I have this date served the foregoing document upon all

participants of record in this proceeding in accordance with section 12 of the rules of

practice.

Shelley S. Dreifuss

SHELLEY S. DREIFUSS
Attorney

Washington, D.C. 20268-0001
August 7, 1997